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Management of Library Website through Content Management System (CMS)

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Abstract

This paper gives a preview of use and importance of websites for libraries as communication tool and discusses the definition and features of content management system and its applications in library management. It describes in brief about the use of content management system used as effective tool for website development, dissemination of information and the content assessment.

Keywords: Web portal, Content management system, Library websites.

1. Introduction

In this era of transition from information age to knowledge society, the libraries have much greater challenges to face and adopt in terms of technology foremost. The whole perception of library has now changed from collection of books to a single window knowledge portal. Library needs to develop user centred and strategic planning and policy has now become part of effective library service management.

In the traditional library, users had to enter the library to use its services and resources. With e-resources and e-services, libraries have started to offer a virtual entrance to the users through the libraries' websites. Library websites not only are a gateway to an institution's resources but also create direct links to the native interface of each resource. Recently, a proliferation of electronic websites with a tremendous amount of information either with high quality, or with low quality, as well as sites that are outright misleading are seen. Fogg (2011) Static websites have no facility to encourage collaborative content development.

Both libraries and open source have same philosophy i.e., 'community first'. Blake Carver's modification of Ranganthan Law is: (i) Software is for use, (ii) Every computer its user, (iii) Every reader his source code, (iv) Save the time of the user, and (v) A system is a growing organism.

Most libraries adopt features such as Internet resources and other electronic/ digital resources, subject gateways and networks and consortia, which are fast gaining acceptance. New trends include the development of libraries' own web sites, the sophisticated application of digital technology, more professional marketing of information products and services, outsourcing, flexi work force, knowledge management and participative management, which are becoming the order of the day. They are adopting free open source applications to fulfil requirements of library services in order to reach out their users.

Due to the unique specifications of the WWW and its importance to commerce, trade of information and particularly scholarly communications, the Web site has become one of the most visible artefacts amongst scholars, and the home page has become the starting point for them to explore the resources available.

Beyond matching the users' content needs with the collection, user attention is best maintained through good design, whether it be in page layout, floor plans, interfaces, entrances, search engines, appropriate selection of technology, or any other aspect of either physical and digital libraries. Good use of technology is always nearly transparent. In summary, improving the users' attention-relationship with the library's web site is best accomplished by developing an online strategy.

2. OSS and Libraries

Open Source Software is software for which the source code is available to the end-user. The source code can be modified by the end-user. The licensing conditions are intended to facilitate continued re-use and wide availability of the software in both commercial and non-commercial contexts. Open source is a development methodology; free software is a social movement'.

It is not privately controlled and hence likely to promote open rather than proprietary formats. It is typically maintained by communities rather than corporations and hence bug fixes and enhancement are often frequent and free. It is usually distributed free of charge. Interoperability and open standards for data are equally important" [OSS Watch, 2005].

According to open source systems for libraries [OSS4Lib], open source systems could improve library services in many ways. "First, when they are licensed in the typical "general license" manner, cost nothing (or next to nothing) to use--whether they have one or one thousand users. Rather than spending thousands on systems, such funds might be reallocated for training, hiring, or support needs, areas where libraries tend toward chronic shortfalls [Sreekumar].

The implementation of OSS in libraries represents a method for improving library services and collections. Let's take advantage of these principles and use them to take more control of over our computing environments [Morgan].

According to Altman, for the library fraternity there are other set of reasons too for preferring OSS over commercial software. Long term preservation, assurance of privacy, provision for auditing, facilitating community resources, and conformity to open standards are hallmarks of OSS.

3. Review Literature

Library websites not only are a gateway to an institution's resources but also create direct links to the native interface of each resource. There are many research carried out in the area of website development for library into different sub areas like weblink analysist,etc. Recently, a proliferation of electronic websites with a tremendous amount of information either with high quality, or with low quality, as well as sites that are outright misleading are seen. The practice offers new opportunities for libraries both in terms of content production and content management, because much of the content is outside the realms of what libraries traditionally collect, organise and deliver. Library website is very broad area and it has various dimensions into which study are done so far.

The uses of web portals or websites have a significant impact on the way libraries are organized offer and facilitate the access to information resources and services. The ways and methods that resources and information services are presented to users have changed because of the use of web pages. (Brake, 2004 and Turner , 2010).

Choy (2011) mentions that librarianship today requires more effort to stay connected with users. He emphasis that libraries need to be part of the new tools that users are using 24/7. If users are using mobile devices as the de-facto interface in their transactions with the electronic

world, libraries must have a presence to take advantage of the heightened convenience that is in the hands of our users (Choy, 2011, p. 67)

The advances in technology have resulted in library users with different expectations along with more access points to information. The reference librarian, to compete with ever evolving virtual media, must now be prepared to join the Twitter generation. Patrons now often contact reference librarians via text messaging, e-mail, IM, Facebook, and Twitter. Reference has become more of a juggling act because librarians must manage everything from face-to-face contact to text messaging reference (Wolfe et al., 2010, p. 111).

Mathews (2007) raises the question of whether reference librarians will continue to wait for patrons to approach the desk or take action and use emerging technologies to make reference more visible to their patrons.

Social networking tools can also be inbuilt into CMS platform to redesign the platform in attractive way to reach out the users. Some academic libraries use an "Ask a Librarian" feature on a Facebook page to offer reference services through this social networking tool (Dickson and Holley, 2010).

Librarians can connect with users on a personal level and reduce anxious library environments to increase interest and access to the library. Librarians can do this if they stay consistently visible through social networking sites and remember that users will interact with the library more if librarians keep their website active (Landis, 2010).

Tagtmeier (2010) states that each social networking tool has its special value and libraries are in a unique position to use a variety of social networks to market themselves and their services. Landis (2010) indicates that social networking sites are constantly changing and librarians need to keep up with these changes in order not to be caught off-guard.

Black (2007) states that libraries and librarians continue to evolve to the culture of their users. The world is in rapid change and it is necessary for librarians to keep up with this pace in order to stay relevant to their communities. King (1998) examined the home pages of ARL libraries to compare design similarities and differences. Cohen and Still (1999) identified core content common to academic library Web sites at research level universities and two-year colleges.

Medeiros (1999) observed that second generation Web design, with its flatter structures and common "look" predominating, is meant to assist users. Dewey (1999) studied access, reference, information, and user education services as described on the Web pages of thirteen member libraries of the Committee on Institutional Cooperation (CIC).

Osorio (2001) studied Web sites of science-engineering libraries at forty five universities, using a prototyping model to access content and design.

Buckstead (2001) discussed the essential components of a Web site for off-campus library services, addressing both content and design features. Islam and Truji (2011), evaluates some selected university websites in Bangladesh from the usability perspectives.

McGillis & Toms and Battleson et al. reported on usability studies of academic library websites. Vijaykumar, et al. reported that the library websites of Indian institutes of technology were different from one another in many respects. Babu analyses the various aspects of the credibility of university websites in Tamil Nadu. He found that the universities studied have their own websites but they lacked standard design and structure.

4. Content Management System

Content management system (CMS) is a collection of procedures used to manage work flow in a collaborative environment. A content management system is used to manage the content of a website is the fastest way to keep one's website content updated. Having a content

management system saves money as a user won't need to pay a web developer every time he wants to modify the content of its website.

Content management systems (CMS) are computer software systems for organizing, displaying and facilitating collaborative creation of content. They consist of readymade functions and modules for manage and organize website content. A CMS would be deployed to "capture, manage, store, preserve and deliver" the content for the web site. The basic features of a content management system are summarized as follows:

- Provides user friendly templates for content creation/addition
- Facilitates thorough quality checking of documents with 2/3 levels of approval process
- Quick updation and dynamic content generation
- Reduce duplication of content
- Extensive cross-linking between pages

There are many commercial library software are in use in the different libraries, open content management software or has generated lot of interest among the library professionals over the past years. There are many CMS available for ready to use in libraries. Joomla software includes features such as page caching, RSS feeds, printable versions of pages, news flashes, blogs, polls, search, and support for language internationalisation. Drupal offers a sophisticated programming interface for developers. Mambo includes advanced features such as page caching to improve performance on busy sites. Features of the popular CMS software packages are mentioned below:

CMS (Developing Agency) Website	Architecture	Multilingual	License	User Easiness
Joomla (Joomla Project Team) http://www.joomla.org/	Extension layer, application layer, framework layer	No. additional	GNU General public license	All friendly
Drupal (Dries Buytaert) http://drupal.org	Template, user permissions, blocks and menus, modules, data (Nodes etc)	Yes	GNU General public license	More developer friendly and less user friendly
Wordpress (Word Press) http://wordpress.org/	Plug-in architecture, template system	No. additional	GNU General public license	Less developer friendly and more user-friendly
DotNetNuke (DotNetNuke) http://www.dotnetnuke.com	Presentation layer, business layer, data layer	Yes	Community MIT and professional propprietary	More user friendly and less developer friendly
Mambo (Mambo) http://mambo-foundation.org/	Template system	Yes	GNU General public license	Less developer more user-friendly
TYPO3 (TYPO3) http://typo3.org/	Visitor-visible frontend and administrative access layer backend	Yes	GNU General public license	More user and less developer-friendly

5. Benefits of Content Management System

Okes (2006) mentioned following benefit to library staff:

- Create and publish content in a standard format without needing to know HTML or other languages;
- Co-ordinate the work of teams of authors and editors (e.g. by ensuring that only one person is editing any individual content item at any one time);
- Control the branding and quality of content (e.g. by ensuring that the correct style sheets are applied, and that changes to the content are approved before they are published);
- Reuse the same content item in multiple different sites and formats.
- Errors on HTML tags occurred at the time of updating the webpage may distort the content of webpage.

Apart from above few other benefits are as:

- User friendly interface can ensure accuracy and save time lag between content creation and publication. Sites become more dynamic as compare to traditions static websites.
- Assessment of specific content and search can also be analysed through different metrics like Google Analytics, SEO etc.
- Help information professionals to manage website content concentrating its accuracy and value without thinking about technical aspects.
- Reaching out the distant users through virtual and physical spaces has become a continuum process. It thrives through multiple, ongoing, iterative interactions.

Library staff can create their in-built content with some innovative ideas to which they mapped to the users requirements like Scholarship Alerts, Interesting articles, Blog writing, multimedia gallery covering pictures and videos, Reviews of books, etc and many more. Through the help of social tool buttons library can also identify the lateral requirement of users which further help in designing new products or services.

6. Conclusion

Library users value timely dissemination of information about library activities and services through library websites. Creation and maintenance of dynamic website content makes an enormous challenge before information professionals and library authorities, it needs money and professional manpower. Compared with the traditional website development, open source content management systems are truly feasible in terms of functionality, cost and maintenance and most important engaging with users through collaboration development. Management of library services through CMS can be made much more attractive and aid to library staff to keep engage their users and respond them timely. Designing of any service or portals required a planned strategy which may help to reach and meet the vision. Content selection and development is itself a research process, this is area in which lost of research needs to be done.

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